

## CLAIM AMENDMENTS

1. (currently amended) A gas-measuring device with noise compensation having a gas sensor  $[(1)]$  for generating a measurement signal  $[(S1)]$  dependent upon gas concentration and which includes a noise component, characterized in that the gas sensor  $[(1)]$  has connected downstream thereof a high-pass filter  $[(13)]$  with an adjustable limiting frequency ~~and whereby the limiting frequency is predeterminable by means of a selector~~ an evaluating unit as a function of the noise component.
2. (currently amended) The gas-measuring device according to patent claim 1 characterized in that a low-pass filter  $[(5)]$  is provided ~~which is~~ connected between the evaluating unit and the gas sensor  $[(1)]$ .
3. (currently amended) The gas-measuring device according to patent claim 2, characterized in that a computing unit  $[(6)]$  is connected between the evaluating unit and the low-pass filter  $[(5)]$  and is provided for calculating ~~[[the]]~~ a pitch  $[(S')]$  of the filter output signal  $[(S5)]$  arising from the low-pass filter 5.
4. (currently amended) The gas-measuring device according to patent claim 1, characterized in that the ~~selector~~ evaluating unit at its output side is connected with a control

input  $[(13.1)]$  of the high-pass filter  $[(13)]$  and is so configured that with it, based upon the pitch  $[(S')]$  of the filter output signal  $[(S5)]$  a value can be selected with which  $[[the]]$  a limiting frequency of the high-pass filter 13 is adjustable.

5. (currently amended) The gas-measuring device according to claim 1 characterized in that the selector evaluating unit is so configured that with it a first filter value can be predetermined when  $[[the]]$  a difference between the sensor value and a set point exceeds a limiting value, so that a second filter value is predetermined when the difference between the sensor value and the set point value lies within a certain range, and a third filter value is predetermined when the sensor value corresponds to the set-point value.

6. (currently amended) The gas-measuring device according to patent claim 5 characterizing in that the first, second, and third filter values are time constants  $[(THE)]$ .

7. (currently amended) The gas-measuring device according to claim 1, characterized in that the high-pass filter  $[(13)]$  has a comparator  $[(3)]$  connected downstream thereof.

8. (currently amended) The gas-measuring device according to claim 1, characterized in that the gas sensor [(1)] is an SnO<sub>2</sub> gas sensor.

9. (currently amended) The gas sensor according to claim 1, characterized in that the gas sensor [(1)] is so configured that nitrogen oxide is measurable therewith.

10. (currently amended) A method of gas measurement with noise compensation, whereby a measurement signal [(S1)] dependent upon gas concentration is produced by a gas sensor [(1)], and the measurement signal [(S1)] can include a noise component, characterized in that the measurement signal [(S1)] is filtered by means of a high-pass filter [(13)] with an adjustable limiting frequency, whereby the limiting frequency is selectable by a selector evaluating unit as a function of the noise component.